

COMMUNICATIONS

The Radiogram

Volume 11 No. 1

Spring 2003

This new year brings lots of opportunities for training and other volunteer activities that will promote and enhance our value to our respective served agencies. It has been two years since the Nisqually Earthquake, and 18 months since the terrorist attack on the World Trade Center. This is a very different world than the one we originally planned our volunteer program for. It would be easy for us to walk away from the complexity and stress of the new demands, but as skilled communication professionals, we need to have our training meet the challenges ahead.

N7LSL, editor

Standardization of communications for first responders.

Another concern for emergency responders is communications. Federal, state and local police, fire and rescue personnel are assigned to use widely separated radio frequencies. They also use different types of computer hardware and software systems with access to different law enforcement databases. At a large disaster site, such as the World Trade Center, responders from different agencies may not be able to use their radios to talk to each other. Other times, a police officer may let a traffic offender go with a ticket, unaware that the offender was wanted on serious charges in another jurisdiction.

NIST, again with funding from the NIJ is working with the public safety community to standardize techniques for wireless telecommunications and IT applications. NIST also is working with standards development organizations to have first responder requirements included within the scope of standardization efforts. For example, NIST is coordinating first responder's standards needs with standard message sets for transferring information among public safety, transportation, and hazardous material incident command centers. In addition to standardization, NIST is helping other agencies select promising interim solutions and is analyzing long-term solutions such as software-defined radio, for research and development investment.

NIST also is working on the development, deployment and standardization of Web-based tech-

(Continued on page 3)

The "Go Kit". What is it and what should YOU have in yours?

If you have been around ARES, RACES, SAR or similar emergency responder communities, you have no doubt heard about the "Go Kit". To those of you who are new on the scene, all this jargon probably takes on an air not unlike learning a foreign language—understandable in time, but of no immediate benefit. With this in mind, let's delve into just what a "Go Kit" is.

In its most basic form, the Go Kit is a pre-prepared group of items, normally in a common carrying case of some sort, that allow the emergency responder to have available to them equipment and supplies that will allow them to function

independently for a specified period of time. Go Kits may be designed for a 24, 48, 72, 96 hour or longer response. The benefit in having this kit previously prepared is so it is put together in a time when you are not actually being 'pushed' to get out the door and get out on the mission. Under more relaxed conditions, you are much less likely to forget important and/or useful items.

Should every emergency responder have the same "Go Kit"? What is in your specific Go Kit will be as individual as is the mission you are supporting. The particular items that you put in your Go Kit may vary from what other person will put into theirs. With this in mind, let's go over some of the essentials for the Ham Radio Emergency Responder to put into their Go Kit.

Remember we said that these supplies and

(Continued on page 3)

ARES Medical Services Team Mission Statement

The role of the Medical Services Communications Team, affiliated with the Western Washington Amateur Radio Emergency Service, is to provide vital emergency communications between medical facilities in the community, local governments, and other emergency management agencies during disaster situations, when normal communications are inoperable or disrupted, utilizing amateur radio voice or digital networks, and other appropriate communications media.

The use of this amateur radio network and team is intended strictly for emergency purposes, to support the medical needs of the community-at-large. This network and team will be exercised on a regular basis to conduct training of appropriately licensed amateur radio operators, and to educate the medical community and other user groups and agencies on utilization of amateur radio during emergency situations.

The Radiogram

**Newsletter of the W.
WA. Medical Services
Teams
Published by:**

**W. WA. Medical Services
Communications
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(Comments or address changes
to above address)

MST TEAM NEWS

Western Washington Medical Services Communications, is incorporated under **IRS TID 91-1869349**. The non-profit corporation provides oversight, training, and fund-raising for all of the Medical Services Communications teams. Grants are being solicited for capital expenses to equip all of the hospitals with up-to-date radio equipment, and for other projects. Donations are tax-deductible.

Anyone wishing a copy of the Articles of Incorporation and By-laws can request one from n7lsl@arrl.net.

Annual Meeting & Election of Officers

The following officers and directors were elected or re-elected at the recent annual meeting of the corporation.

President: Marina Zuetell, N7LSL
Vice-Pres: Allan Kush, WV7R
Secretary: Carlos Smith, AA7SB
Treasurer: Dave LeFevre, KC7FEC

Board Members:
Chris Jones, N7ZW (new)
Duane Mariotti, WB9RER
Mark Sheppard, N7LYE
Wayne Shinoki, KC7SYA
Ned Worcester, KB7NFO

Web Pages of Interest
**City of Seattle Emergency
Management and ACS:**

<http://www.ci.seattle.wa.us/seattle/eoc/acs/>

**ARRL Emergency Coordinators
Certification program**
<http://www.arrl.org/cce>

**Washington State ARES/
RACES**
<http://www.sinclair.net/ares/>

**ARES/RACES Oregon Packet
Web site:**
<http://www.arespacket.com/>

**Homeland Security—the
Official Web page**
<http://www.dhs.gov/dhspublic/>

Team Jackets Available!!

The new team jackets are navy blue with jade lining and trim light-weight shells, suitable for indoor or summer wear. The team logo is custom-embroidered on the back, and your name and call-sign on the front.

We have negotiated a special price of \$68.00, if we order 4 at a time.

Please contact Marina Zuetell, N7LSL for ordering information or pick up a form at the next training meeting.

Team Shirts and Hats

Shirts and hats, with the new team logo are available for sale now.

Golf shirts are available in navy or natural, S to XL, for \$23; XXL \$25. Navy blue baseball caps – \$12. Optional customization is additional. Call or E-mail for additional information or an order form.



**Homeland Defense from a
NON-government organization
perspective**

<http://www.twotigersonline.com/resources.htm>

Centers for Disease Control
<http://www.cdc.gov/>

**Greater NY Hospital Association
Emergency Preparedness**

<http://www.gnyha.org/eprc/general/datacomm/>

Standardization

(Continued from page 1)

nologies for integrating sensors, real-time video, smart tags and embedded micro-processor devices to provide next-generation personnel support for remote monitoring, control and communications in the field. This technology can enable rapid access to real-time sensor and video information and allow sharing and collaborative use of IT applications. Wearable computers and small, embedded devices integrated with the latest technology for remote sensing, real-time conferencing, and other data intensive applications could provide an immediate feedback channel for law enforcement agents and emergency responders. NIST is working to demonstrate how these technologies can be extended and rapidly deployed to create easily configurable networks.

California Conducts Statewide Medical and Health Disaster Exercise

The state of California conducted the 4th annual statewide Health and Medical disaster exercise on November 14, 2002. The California Emergency Medical Services Authority sponsored this one-day exercise.

The exercise incorporated hospitals, clinics, long-term care facilities, pre-hospital care providers (ambulances, etc), auxiliary communications networks, blood banks, and local and regional government agencies.

This year's scenario was a radiological incident involving a "dirty bomb" at a local high school. The exercise incorporated sheltering-in-place procedures, as well as field decontamination of victims.

Primary ACS objective was to test the existing radio network between health care facilities and government agencies.

The "Go Kit"

(Continued from page 1)

equipment will allow you to work independently. If we are putting together a 48 hour kit, you would likely include the following items:

Food. You should include food and water. This is especially important if you have special dietary needs. Depending on your mission, you may or may not be fed during a crisis. Your rations should include foods that do not require refrigeration. Military surplus "MREs" are something to consider. But you may also consider trail-mixes, protein bars, dried fruits, even canned foods. Many missions would not be conducive to heavy or bulky supplies however, so be sure to consider where your mission is, and how you are going to be transported to it.

Clothing. Have packed changes of clothing appropriate for where your mission is. Bermuda shorts may be comfortable, but not exactly useful if you are detailed to Hurricane Ridge in the middle of January. Make sure your clothing is comfortable...as well as expendable. But most importantly, make sure that your clothing fits mission parameters. Not only is it to be comfortable (as near as possible) but it needs to offer you the required level of protection for where you are working. THIS requirement can vary widely, and is something you need to discuss with your team and the customer you are serving.

Radios. Since you are reading a newsletter aimed at the amateur radio population, it will be assumed that you will be needing some radio equipment in your Go Kit. If you are bringing equipment to be used during the emergency, make sure you are bringing everything you may need, including the radio(s), microphone, tuner, antenna and power supply. You may

also wish to bring some sort of broadcast receiver that will allow you to keep informed of news 'from the outside'. Many modern amateur radios have wide-band receive capability, allowing one radio to fulfill several functions in this respect.

Ideally you will have your radio and sufficient back-up power to operate it for the duration that you are preparing for. This may mean several back-up battery packs, gel-cells, recharging units, or even a small generator if your mission location allows for one. A back-up antenna is advisable. Something that is light-weight and relatively easy to set up.

You should also have a prepared list of operating frequencies, a personal phone book with numbers of friends, family as well as mission-specific telephone numbers in it. Remember, if you think these things out in advance and prepare for it then, you will arrive at your mission far better prepared than if you are running through your home, throwing together a kit as you head out the door. Be sure to have a prepared checklist of items you will need. AND USE IT!

Next issue we will cover a few more basics and give you ideas on how to select the proper radio equipment for your Go Kit.



Communications Initiatives: An Overview

Let me take this opportunity to discuss in detail one of the most important initiatives the Department is working on: radio communications. In discussing our plans, I will try to clear the air about any misconceptions there might be regarding the current status of our communications initiatives—an issue I know is on the minds of nearly every member of the Department.

We have devoted a great deal of time in the past six months to meeting with the Mayor, top communications specialists, the experts on our Terrorism Preparedness Task Force and even military contractors about the Department's communications difficulties. We also have created a team of Officers, senior Chiefs and other advisers dedicated to working full-time on communications initiatives.

Out of those meetings have come two fundamental conclusions:

1. It's not the radios; it's the communications system—a system whose problems must be addressed with the long term development of a reliable and redundant communications infrastructure that boosts our radio signals.
2. Nobody in the world, in fact, has been able to develop such an infrastructure that is 100 percent reliable—especially in high-rise buildings and “sub-grade” locations like tunnels, subways and basements.

We have formulated short and long term plans to create such a communications network for the Fire Department. And those plans are already being implemented. The first step concerns our handheld radios. Much has been written

about the performance of the radios on and after 9/11, but I must stress that the radios themselves are only a small part of a much larger solution. Under most circumstances, our radios work fine. However, without an adequate system of signal boosters or repeaters, those radios cannot provide reliable communications in high-rise buildings and sub-grade locations. Such signal-boosting devices are essential because no handheld radio has the power to reliably penetrate the large amounts of steel, concrete and other materials present in tall buildings and underground facilities.

This past Spring, the Department began pilot testing converted Motorola XTS3500 radios, first at the Fire Academy and soon thereafter in Divisions around the city. These radios have a number of benefits: they operate on UHF, have more available frequencies and recently were converted from digital to analog to better address our needs in the field. The XTS3500 also gives us the ability to communicate with EMS, NYPD and other agencies, as well as tap into the pre-existing communications infrastructures.

Satisfied with the results of our initial small-scale tests, we deployed XTS3500s to the entire borough of Staten Island in a pilot program to assess their performance in the actual fire-fighting operations. We also conducted weekend test of these radios in other Divisions and now we are working on a final analysis of the XTS3500's performance in the field.

The preliminary results of this borough-wide testing have been encouraging. We are, however, still analyzing the data from our tests and working with Motorola

to address some issues that have been raised by the Firefighters and Officers responsible for testing the radios. At this time, we anticipate full deployment of these radios as early as January 2003.

As the new radios are deployed, so will a system of enhanced cross-band repeaters, fixed in Battalion cars to facilitate flexible positioning at the scene. Using these vehicular cross-band repeaters in conjunction with the 25-watt portable command post radios will provide a strong back-up to the command channel. But like the radios, these vehicular cross-band repeaters will be only part of a much larger solution.

Mobile high-watt signal boosters ultimately will supplement fixed communications technology, which will, in time, be the core of our reliable, redundant network. To develop this fixed communications network, we have pursued a number of different options—many of which work together to form a single, robust network.

We have been working with the Police Department to examine whether certain aspects of their communications infrastructure can be used by the Fire Department. Initial tests already have shown that the Police Department's City-wide infrastructure of transmitters and receivers could help the Fire Department with its communications at incidents involving high-rise buildings.

But the Police Department's infrastructure still doesn't always provide the level of in-building coverage that the Fire Department needs. That is why we have also been working with the

(Continued on page 5)

Communications initiatives (cont'd from Page 4)

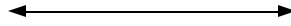
Building Owner's Management Association (BOMA) and the Department of Buildings' World Trade Center Building Code Task Force to improve in-building emergency communications standards.

It became clear on 9/11 that all high-rise buildings should be required to have fixed communications technology that the Fire Department and other responding agencies can utilize in case of emergencies. The Fire Department is pursuing legislation requiring all high-rise buildings to install first responder-compatible repeater systems. Fire Department senior officials, Mayor Bloomberg and some City Council members already have expressed an interest in advancing that kind of legislation. We are optimistic that our work with both BOMA and the Department of Building's WTC Task Force will yield positive results.

The MTA also is working on a program to resolve communications difficulties in subways by installing bi-directional antennae and boosters throughout the subway system. We have been working with the MTA to ensure that our communications equipment is compatible with the equipment they are installing. The MTA program is part of a larger effort to address other communications "dead spots" in public spaces such as subways, tunnels, and large train stations like Grand Central and Penn. We will continue to work with the City to ensure that we have consistent signal coverage in those spaces.

In sum, we have been working hard to address the issues regarding radios and communications with the Department. While this is a highly complex techno-

logical problem to which there is no single answer, we are committed to providing all members of the Department with the best communications system available. Nothing less is acceptable.



AT THE REQUEST OF THE CALIFORNIA OFFICE OF EMERGENCY SERVICES THIS SPECIAL BULLETIN IS SENT TO ALL EMCOMMWEST SUBSCRIBERS -

> > -----

---->> Homeland Security Threat Advisory: Suspicious Activity

We have received information from APCO (Associated Public Safety Communications Officers, Inc.) members that they have received numerous calls of a suspicious nature from people describing themselves as college students performing research.

The questions have included specific communications infrastructure location information requests. Additionally, there have been reports of people recording and photographing public safety communications towers.

While there has been no evidence to suggest these are not legitimate actions, APCO advises you to pay close attention to such activity and report anything suspicious according to your local Standard Operating Procedures (SOP). APCO further advises not to release information to persons of unknown origin at this or any other time.

Additionally, APCO recommends that you re-evaluate your internal Standard Operating Procedures (SOP) for procedures on handling these types of calls to ensure this issue is addressed specifically for communications related information during this time of heightened security.

Subject: FYI...Use caution

This afternoon, I receive a suspicious call from a gentleman claiming to be long distance and repre-

sentative of a "study of a Western College", desiring to speak to the person who could best answer questions concerning the radio repeater system we operated on in Rockdale County, Georgia.

He volunteered he had gotten my name and address from APCO Int. and that this research was for a college paper.

He spoke and sounded middle-eastern and was very disappointed when I told him I did not give "any" information out concerning my radio system to anyone by phone, and he could place his request in writing... He started to stammer and ask how he would do that, and I informed him he had my name and number and he should have my address and I ended the call.

I do not expect to receive anything in the mail from this individual. Recently, a discovery in Virginia upon a routine traffic stop it was found that a map of the entire state's radio system (towers etc) was found in the possession of a suspicious individual. **WE DO NOT NEED TO ASSIST IN THE COMPILATION OF THIS INFORMATION.**

Please **DO NOT** give out any information to inquiries about your communications system, 911 switches, or other type of surveys that could furnish information to wrong people.

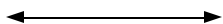
I wish I had been able document the caller's phone number, as I have caller ID, but it was not retrievable on my system. If any of you receive these calls, if you can get a call back number or more information, please do so and forward to GEMA. I am notifying GEMA at this time.

Thanks
Carolyn H. Hunter
Communications Director -
Rockdale County GA

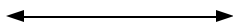
Around the Region

Pat Nicholson, N7WGR, MST Emergency Coordinator for Pierce Co. has been keeping very busy lately! Besides attending Paramedic school, and working for American Medical Response as an EMT, he has been working with the hospitals and health department in Pierce County to get radio equipment purchased and installed, antennas repaired or replaced, and arranging for training and credentialing at the various hospitals. He also will have a VHF packet link up soon, and will be putting up a tower for his repeater in Brown's Point (N. Tacoma) come spring.

There will be a training meeting on March 15 at Tacoma General (Multicare) about the Hospital Emergency Incident Command System.



Information on Public Safety Communications Interoperability can be found at the following URL. It is downloadable as an Adobe Acrobat file, and makes for pretty interesting reading. The report is 104 pages, so don't try to print it at home.
http://www.agileprogram.org/ntfi/ntfi_guide.pdf



Changes in ARES Leadership
Effective January 29, 2003 there has been a leadership change in the ARES of Western Washington.

Former Section Emergency Coordinator (SEC) Ed Bruette, N7NVP of Poulsbo is now Assistant Section Manager (ASM). Ed is also the States RACES Officer

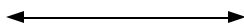
Former District Emergency Coordinator for District #4 and acting SEC, James Pace, K7CEX of Centralia is now Section Emergency Coordinator for Western Washington.

King County ARES has a new Emergency Coordinator, after a year-long search:

Ron Zuber, KC7RWT, who currently works at the King County Office of Emergency Management, and was formerly president of their EOC Support Team, has accepted the appointment of EC for King Co ARES. He plans to familiarize himself with the current team leaders and their teams, and work to integrate them into the Regional Disaster Response Plan.

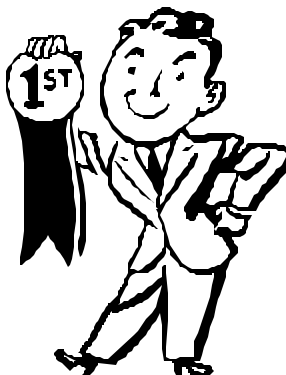


San Juan County also has a newly appointed Emergency Coordinator, Samuel L Hendrickson, AC7HR. Sam is a resident of Lopez Island.



Citizens of the Year Honor

District 2 District Emergency Coordinator, Owen Mulkey, N0WO, and his wife Nan, KD7AKA, received "Citizens of the Year" awards for Marrowstone Island, for their work in emergency communications on the island and within District 2. Congratulations Owen and Nan!



EMERGENCY NETS

Washington State Emergency Net

Mon. - 6:30 p.m.

Sat. - 9:00 a.m.

3.985

Island Co. ARES Net

Mon - 20:00 p.m.

145.25 - /R (127.3)

King Co. ARES Net

Sun. - 20:00 p.m.

146.820 - /R (103.5)

Local Team Nets occur at various times during the week.

Kitsap Co. ARES Net

Sun. - 19:30 p.m.

145.430 - /R (179.9)

Mason Co. ARES Net

Sun. - 21:00 p.m.

146.720 /R (103.5)

Pierce Co. ARES Net

Tues. - 19:00 p.m.

145.37 - /R (136.5)

San Juan Co. ARES Net

Wed. - 20:00 p.m.

146.90 /R (131.8)

Snohomish Co. ARES Net

Sun. - 20:30 p.m.

146.920 - /R (123.0)

Thurston Co. ARES Net

Tues. - 19:00 p.m.

147.36 + /R

Whatcom Co ARES Net

Sun. - 19:00

147.16 + /R (103.5)

(corrections to the Net list need)



2003 Medical Services Team Training Schedule

The following dates and topics are planned for the 2003 Medical Services Team Training Schedule. They are tentative and could change due to circumstances beyond our control. Please mark these dates in your calendar so you can plan to attend. Confirming notices will be mailed out prior to each class. Dates of other significant training events are included for your reference

The following dates and topics are planned for the 2003 Medical Services Team Training Schedule. They are tentative and could change due to circumstances beyond our control. Please mark these dates in your calendar so you can plan to attend. Confirming notices will be mailed out prior to each class. Dates of other significant training events are included for your reference

1/25/03 Introduction to ARRL Emergency Communications Level 1 course – Homework!
Connector party for Anderson Powerpole 12v DC connectors
Annual MST Membership meeting – Election of Officers

3/1/03 Completion of ARRL EMComm Level 1 course, and testing.

3/8/03 *Mike & Key Hamfest*

3/22-23/03 Communications Academy 2003 - Shoreline Conference Center

4/22-23/03 *WSEMA Partners in Emergency Preparedness Conference – Bellevue*

Sign up for First Aid/CPR/BBP FACTS class at the SAR Academy

4/5-6/03 *KCSARA Spring Training Academy – McKnight Middle School*

4/26-27/03 *KCSARA Spring Training Academy – McKnight Middle School*

5/3/03 Introduction to the Hospital Environment ***Note Date Change!**
TopOff 2 Briefing

5/12-16/03 TopOff 2 Exercise –

5/24/03 Hospital Emergency Incident Command System – (HEICS)
TopOff 2 Debriefing

6/21-21/03 **Field Day** - joint operations with City of Seattle

7/??/03 *Seahawk Briefing & Exercise TBD*

8/5/02? Summer Picnic – ARES and ACS teams

9/13/03 Helicopter Awareness - Refresher

9/27-28/03 *KCSARA Fall Training Academy – McKnight Middle School*

10/11-12/03 *KCSARA Fall Training Academy – McKnight Middle School*

11/15/03 Critical Incident Stress Management

12/20/03 TBD
Holiday party

Pierce Co, and other county training for Medical Services are still being worked out.



Emergency Communications Team
12400 E Marginal Way S
M/S AMB1 – ISD
Seattle, WA. 98168

TIME VALUE MAIL

Communications Academy 2003

This year's Communications Academy will be held March 22-23, at the Shoreline Conference Center, from 8:00—17:00 each day.

Classes are planned to meet the needs of both beginner and more advanced communicators, and those with an interest in emergency management and public safety.

Saturday Keynote session will be Jim Mullen, Director of Seattle Emergency Management, speaking on **Surviving Disasters: Communities are Key**,

Sunday Keynote Session will be Batt. Chief Randy Hansen, Seattle Fire Department, speaking on **TopOff 2: Seattle's WMD/RDD Exercise**.

The Shoreline Conference Center is at 185600—1st Ave NE, Shoreline, WA.

Please visit the Academy Web page for more information about topics, speakers, and conference details, and on-line registration.:
<http://www.commacademy.org>

There is a small charge for registration, to defray the facility costs. Advance registration is encouraged. Box lunches will be available both days.

Pierce County Medical Services Team Training Meeting

Saturday, March 15, 2003

Time 1200-1400

**HEICS: Hospital Emergency
Incident Command System**

Eileen Newton

**Emergency Preparedness Coordinator
Franciscan Health Care System**

**Tacoma General Hospital
(Multicare) Annex**

**409 J Street in Conference Room 6.
Tacoma**

**All are invited to attend this interesting
presentation on the hospital-oriented system
of Incident Command**

**Contact Pat Nicholson, N7WGR at
patn0011@earthlink.net**

**If you need additional details or wish to join the
Pierce Co team.**